

## Section III

# Defense Industry

Map 3.1 Military Installations in Hampton Roads.....	37
Figure 3.1 Cycle of National Defense Spending.....	38
Figure 3.2 Cycle of National Defense Spending as a Share of Gross Domestic Product .....	38
Figure 3.3 Projected Defense Budget .....	39
Figure 3.4 Inflation Adjusted Department of Defense Spending .....	39
Figure 3.5 Total Military Personnel in Hampton Roads & the U.S. ....	40
Figure 3.6 Military Personnel as a Share of Hampton Roads Total Employment .....	40
Figure 3.7 Hampton Roads Military Employment Share by Branch.....	41
Figure 3.8 Inflation Adjusted Military Incomes .....	41
Figure 3.9 Military Incomes as a Share of Hampton Roads Incomes .....	42
Figure 3.10 Total Ship Building and Repair Employment in Hampton Roads .....	42
Figure 3.11 Concentration of Ship Building and Repair Employment in Hampton Roads..	43
Figure 3.12 Ships Based in Hampton Roads and Share of Navy Total .....	43
Figure 3.13 Total Contracting for Building and Repair Performed in Hampton Roads .....	44

## The Defense Industry in Hampton Roads

The Department of Defense (DoD) serves as the primary driver of the Hampton Roads economy, with impacts through military personnel, military families, federal civilian employees, military contracts, and the numerous veterans who call this region home. The Economic Impact of the Department of Defense in Hampton Roads (Nov 2013) report estimated that through direct, indirect, and induced impacts, the DoD supports 39.7% of all regional employment.

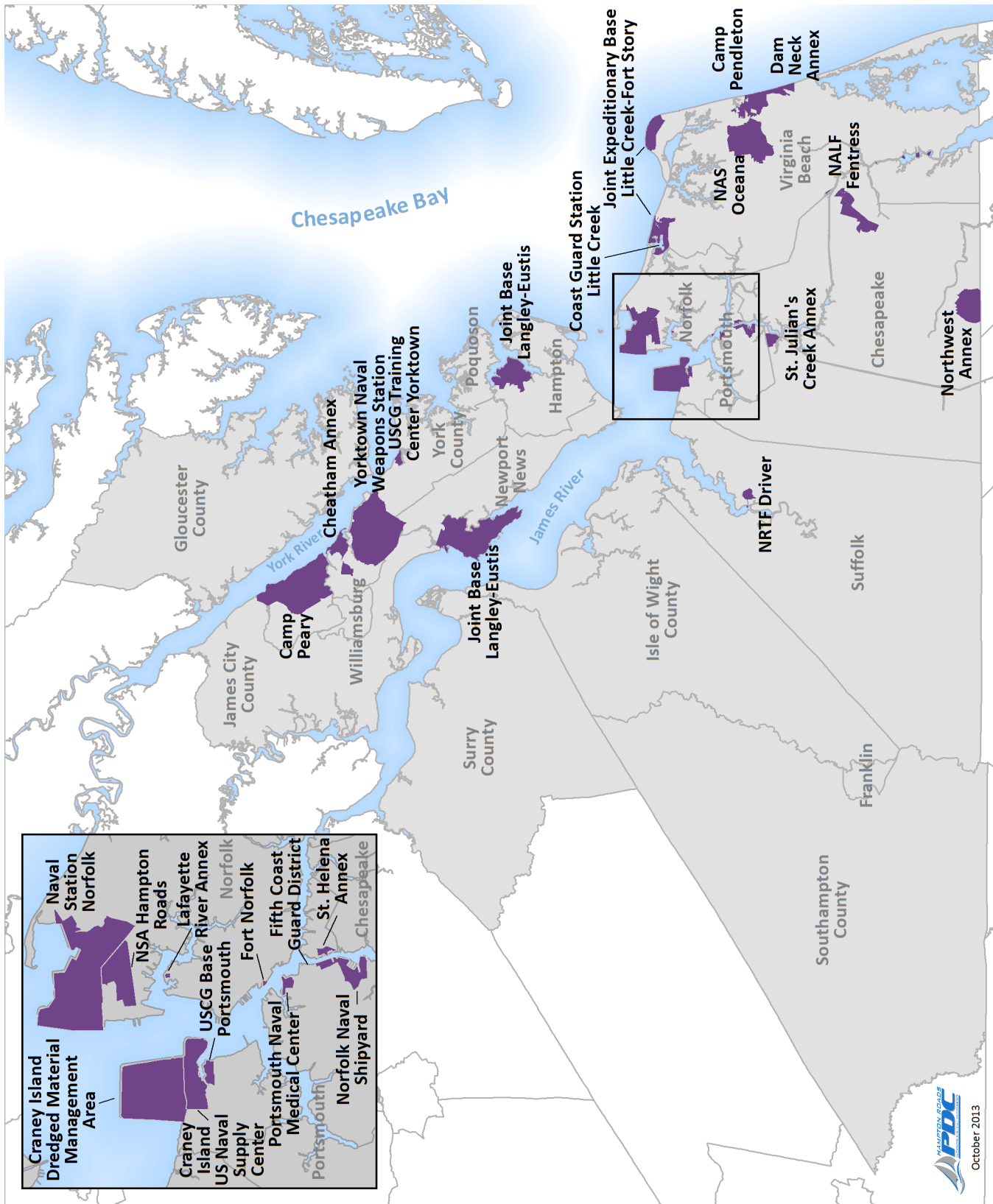
DoD spending sustained high real levels of spending through the second half of the past decade, but the combination of winding down the wars in Iraq and Afghanistan, budget pressures from the recession, and changing spending priorities will likely cause defense spending to decline both in absolute terms and as a share of GDP. Reflecting the change in national spending, DoD contracting dollars in Hampton Roads have begun to decline in recent years after a strong period of growth between 2001 and 2011.

The number of military personnel in Hampton Roads changes based on strategic needs, but has been generally declining since the end of the Vietnam conflict except for the 1980's and the beginning of the War on Terror. As military employment has declined, its share of total regional employment and regional incomes have also. Still, some of the decline in military personnel had been replaced by contracting dollars as the military began to employ contractors and local businesses to complete tasks formerly left to uniformed personnel.

The Ship and Boat Building & Repair Industry in Hampton Roads serves as its own sub-cluster within the larger Defense related industries in Hampton Roads. Newport News Shipbuilding remains one of two U.S. shipbuilders capable of building nuclear submarines and the only shipyard in the U.S. capable of building nuclear aircraft carriers. Additionally, there are numerous other shipyards in the region that maintain the U.S. fleet, and are significant employers in Hampton Roads.

The Defense Industry Section of the Benchmarking Study contains 1 map and 13 graphics illustrating the state of the DoD and its impact on this region.

**Map 3.1 Military Installations in Hampton Roads**



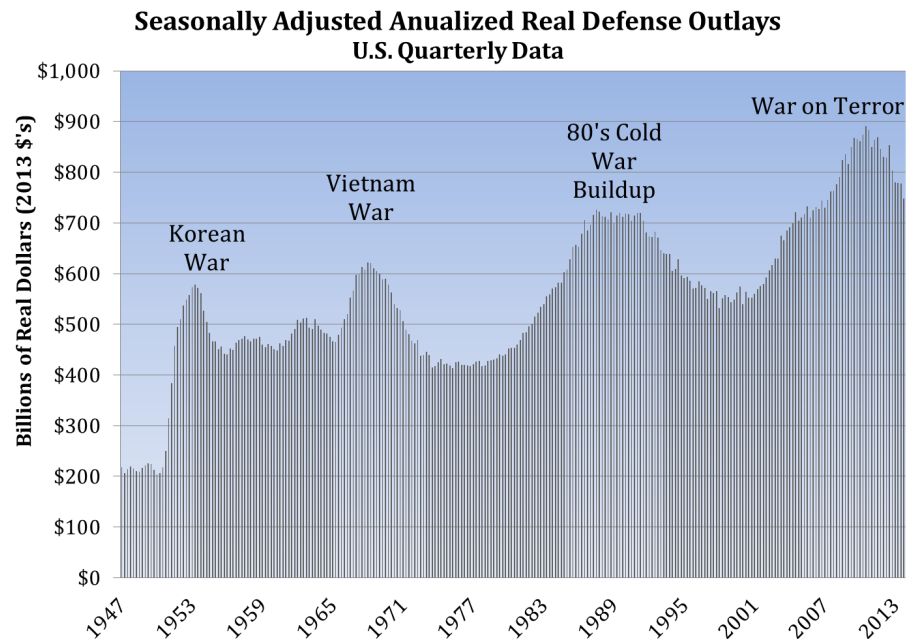
**Figure 3.1 Cycle of National Defense Spending**

**Why is it important?**

Defense expenditures in Hampton Roads are closely tied to federal defense outlays. National defense spending has a direct impact on the regional economy.

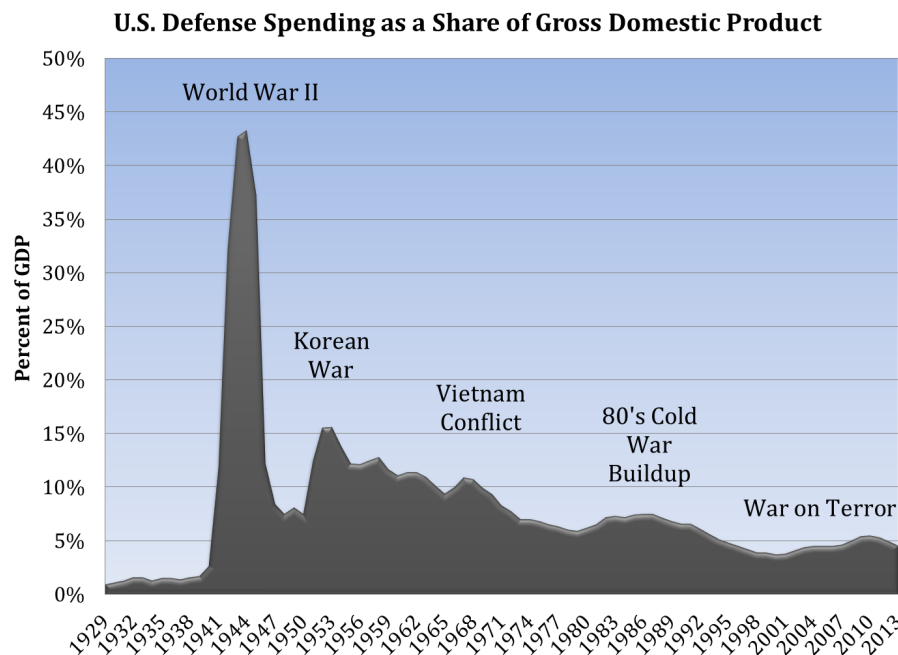
**How are we doing?**

National defense spending increased during the Reagan Administration and fell following the collapse of the USSR. Defense spending began increasing again around the turn of the century, but has contracted recently as a result of the fiscal challenges that face the nation.



Source: Bureau of Economic Analysis, HRPDC

**Figure 3.2 Cycle of National Defense Spending as Share of Gross Domestic Product**



Source: Bureau of Economic Analysis, HRPDC

**Why is it important?**

Overall levels of defense spending, both in the U.S. and other countries, are often tied to growth in gross product.

**How are we doing?**

Defense spending in terms of gross product has declined significantly since the beginning of the Cold War. This results from a larger U.S. economy and changing government spending priorities. As government healthcare expenses continue to grow, defense spending, as a share of gross domestic product, will likely continue to decline unless the government begins to raise new revenue.

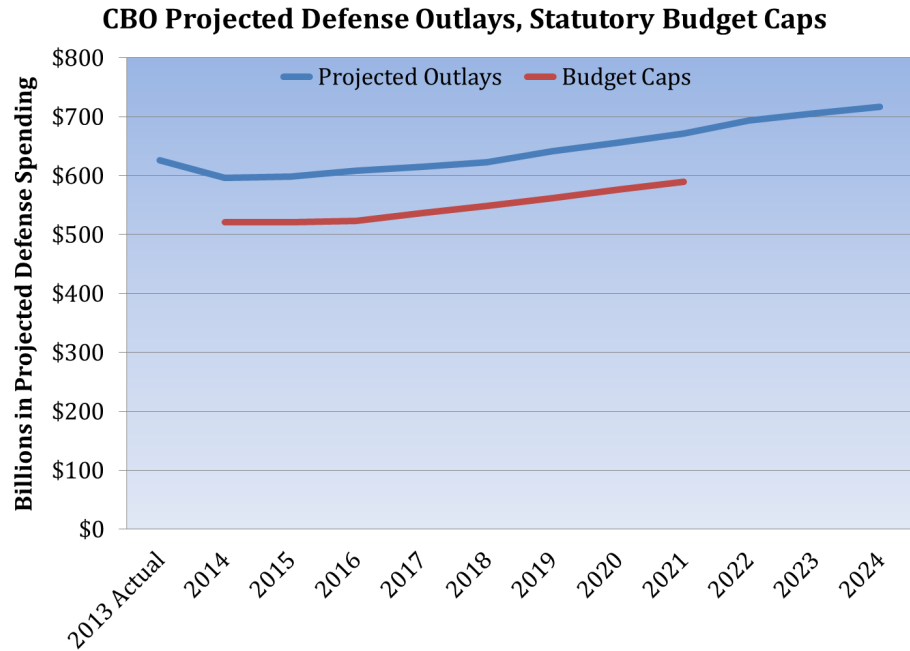
**Figure 3.3 Projected Defense Budget**

**Why is it important?**

Defense expenditures are important to the local economy, and the two factors that determine defense spending in the region are the share of U.S. defense spending which comes to Hampton Roads, as well as the overall level of spending.

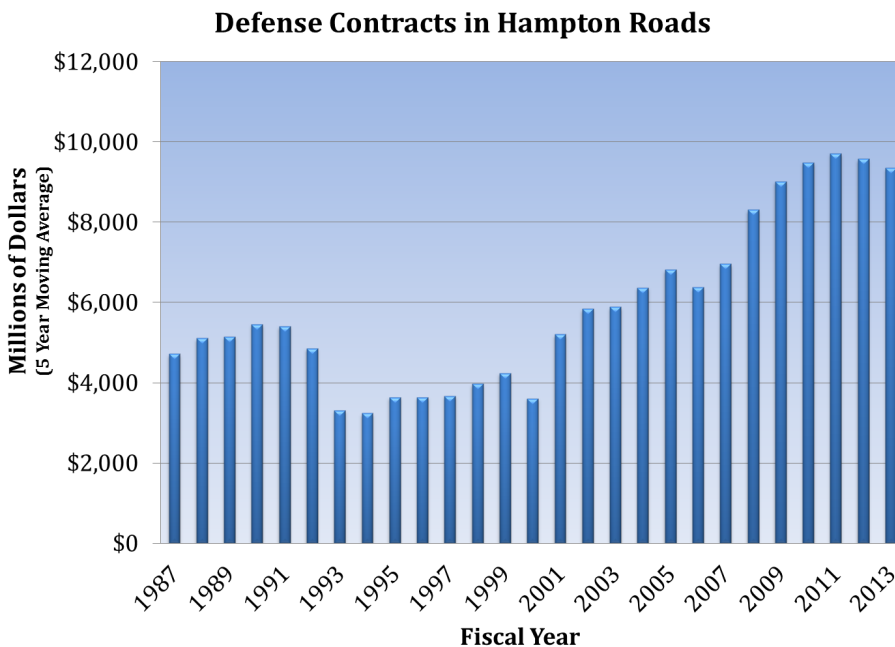
**How are we doing?**

The Congressional Budget Office projects that U.S. defense spending will remain above the levels proscribed by the Budget Act of 2011 (including sequestration), shown by the red line. While the budget is forecast to experience nominal growth, it is from a smaller base than just a few years ago.



Source: Congressional Budget Office, HRPDC

**Figure 3.4 Inflation Adjusted Department of Defense Spending in Hampton Roads**



Source: USAspending.gov, Consolidated Federal Funds Report, HRPDC

**Why is it important?**

Spending on defense contracts in this region supports a significant portion of regional economic activity. This figure shows the dollars obligated for Department of Defense contracts that were performed in this region.

**How are we doing?**

After a long period of growth in defense contracts performed in this region, the contracting dollars in this region have been declining since 2011, which has contributed to the region's tepid recovery from the Great Recession.

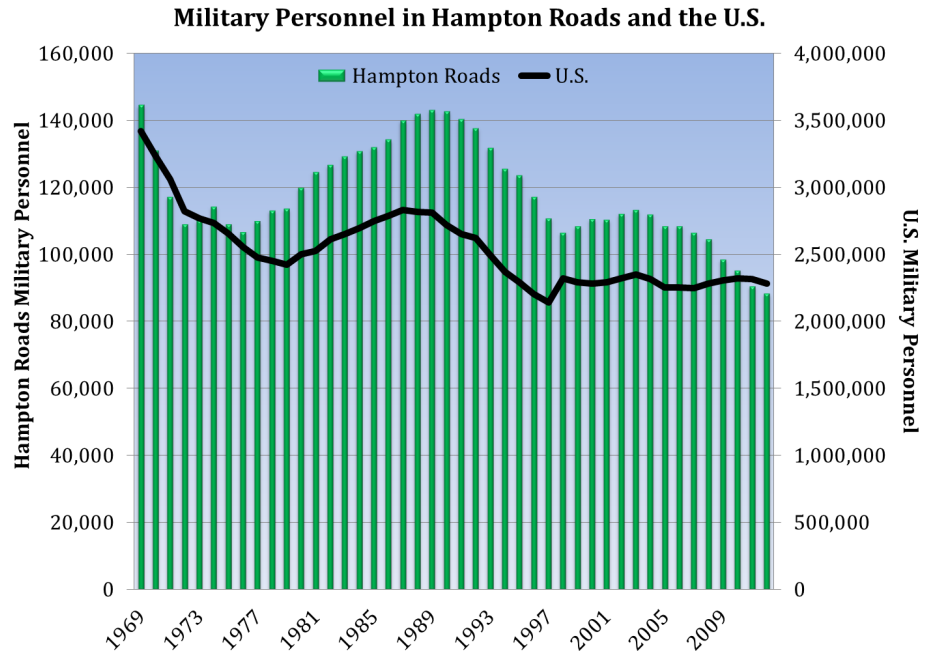
**Figure 3.5 Total Military Personnel in Hampton Roads & the U.S.**

**Why is it important?**

Due to the oversized DoD presence, military personnel have a profound impact on Hampton Roads. The change in the number of military personnel adjusts the region's requirements for schools, housing, and support services.

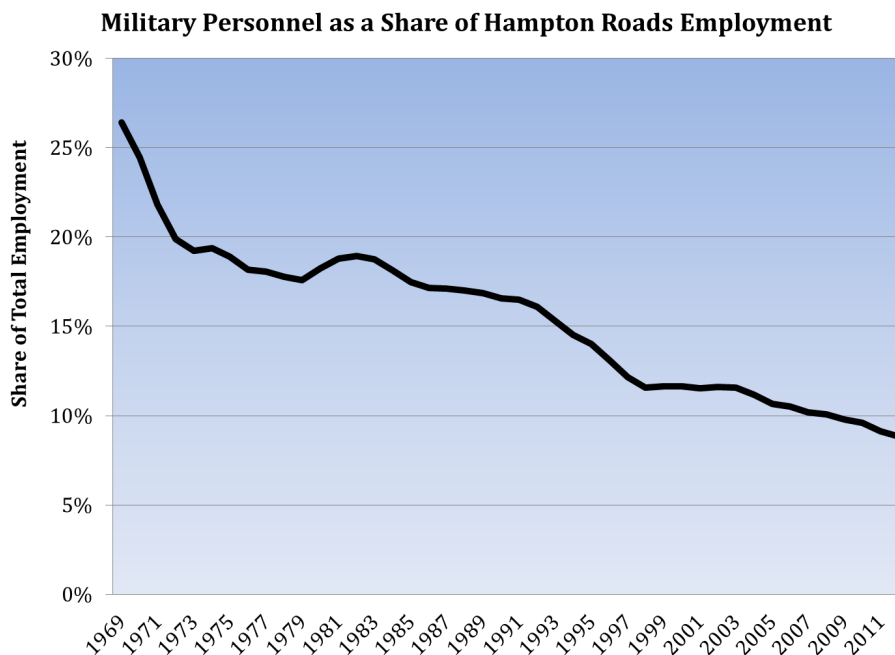
**How are we doing?**

The number of military personnel in Hampton Roads fluctuates with the strategic requirements of the nation. After rising briefly with the war on terror, the number of military personnel in Hampton Roads has declined at a steady pace since 2003.



Source: Bureau of Economic Analysis, HRPDC

**Figure 3.6 Military Personnel as a Share of Hampton Roads Total Employment**



Source: Bureau of Economic Analysis, HRPDC

**Why is it important?**

One way of measuring the impact of military personnel on the Hampton Roads economy is to compare the relative size of military personnel to regional employment.

**How are we doing?**

Military personnel's share of regional employment has been on a fairly steady decline since the end of the Vietnam War. This reflects both the generally declining level of military personnel, as well as growth in other types of employment.

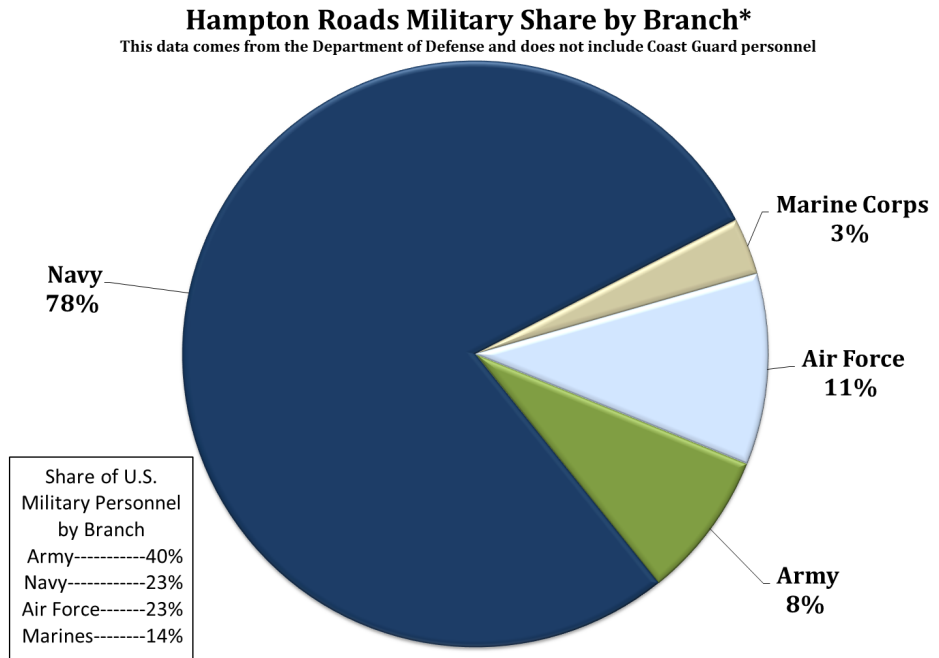
### Figure 3.7 Hampton Roads Military Employment Share by Branch

#### Why is it important?

As the overall Department of Defense budget changes, it affects the different branches in their own unique ways.

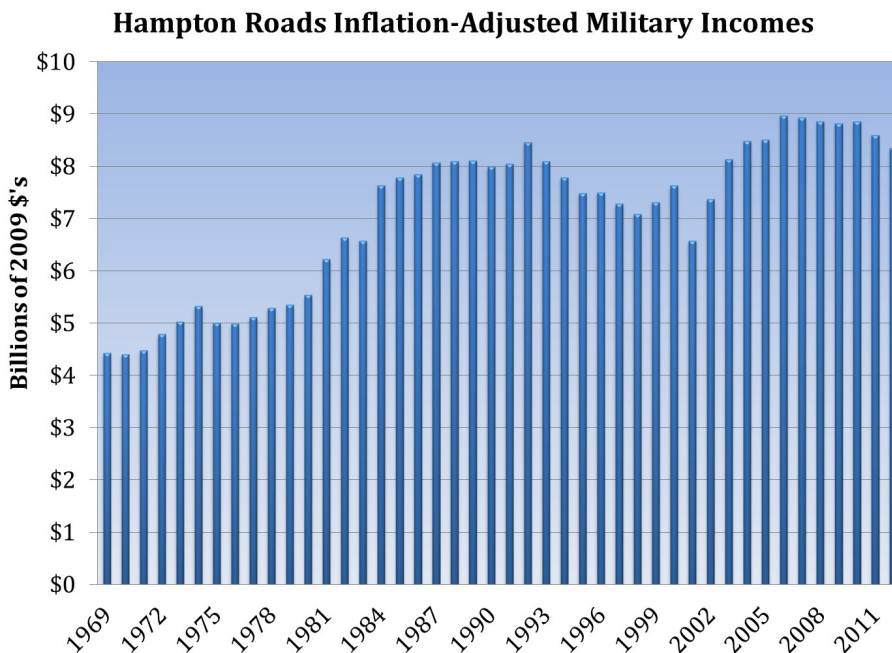
#### How are we doing?

The military personnel in this region are heavily tied to the Navy, with 78% of all personnel serving in that branch. This has served the region well recently, as the cuts to personnel have been much heavier to the Army and the Marines than they have to the Navy.



Source: Department of Defense Base Structure Report FY2013, HRPDC

### Figure 3.8 Inflation-Adjusted Military Incomes



Source: Bureau of Economic Analysis, HRPDC

#### Why is it important?

How well compensated the military personnel in this region has important impacts on military families' well-being, their ability to participate in the labor market, and their economic impact on the region.

#### How are we doing?

Total military income in the region remained at a high level during the previous decade despite cuts to the number of personnel in the region. This was a result of both increasing salaries and benefits to help retain personnel during the wars in Afghanistan and Iraq.

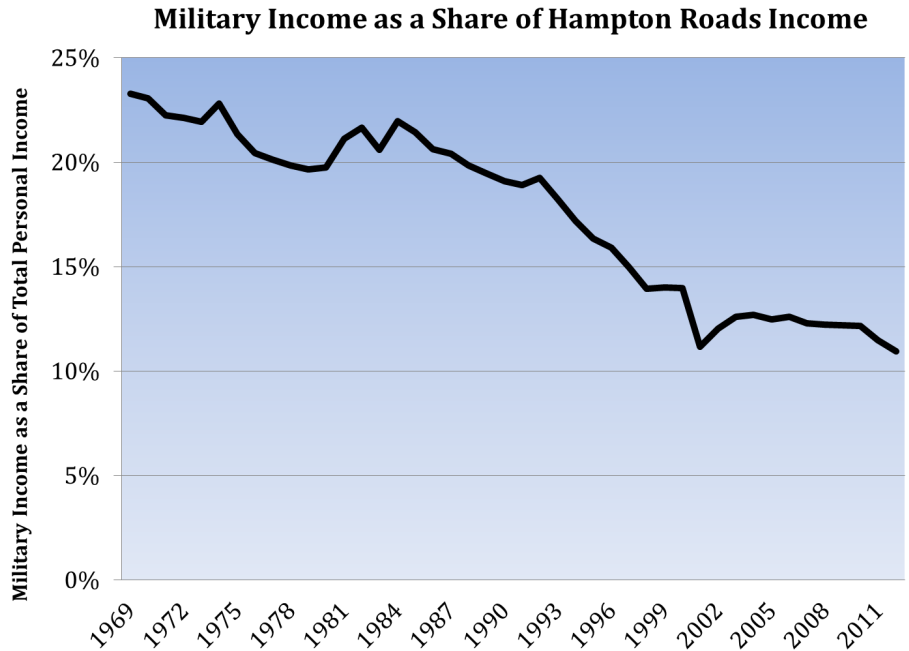
**Figure 3.9 Military Incomes as a Share of Hampton Roads Incomes**

**Why is it important?**

Measuring military incomes as a share of the region's total personal income quickly shows their ability to support regional business.

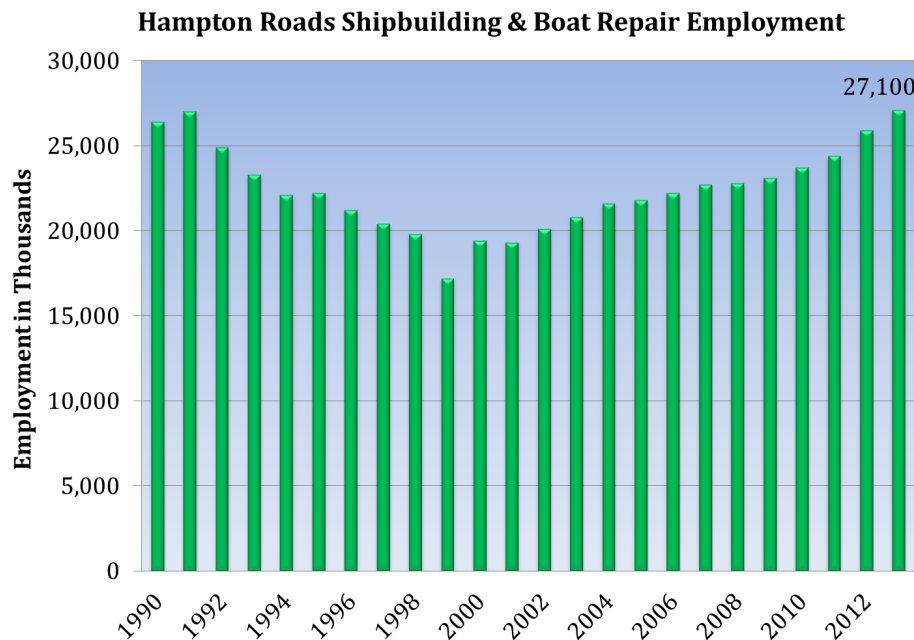
**How are we doing?**

Military incomes have been a declining portion of regional incomes, as other sources of personal income in the region have grown over the ensuing years.



Source: Bureau of Economic Analysis, HRPDC

**Figure 3.10 Total Ship Building and Repair Employment in Hampton Roads**



Source: Bureau of Labor Statistics, HRPDC

**Why is it important?**

The shipbuilding and repair industry serves as a sub-cluster within the region's defense industry. This industry provides well-compensated jobs for individuals across the education spectrum.

**How are we doing?**

Regional employment in this industry declined during the 1990's, but recovered during the past decade reaching 27,100 employed in the ship repair & boat building industry in 2013. Additionally, this does not include those who work at Norfolk Naval Shipyard in Portsmouth who are considered federal employees.

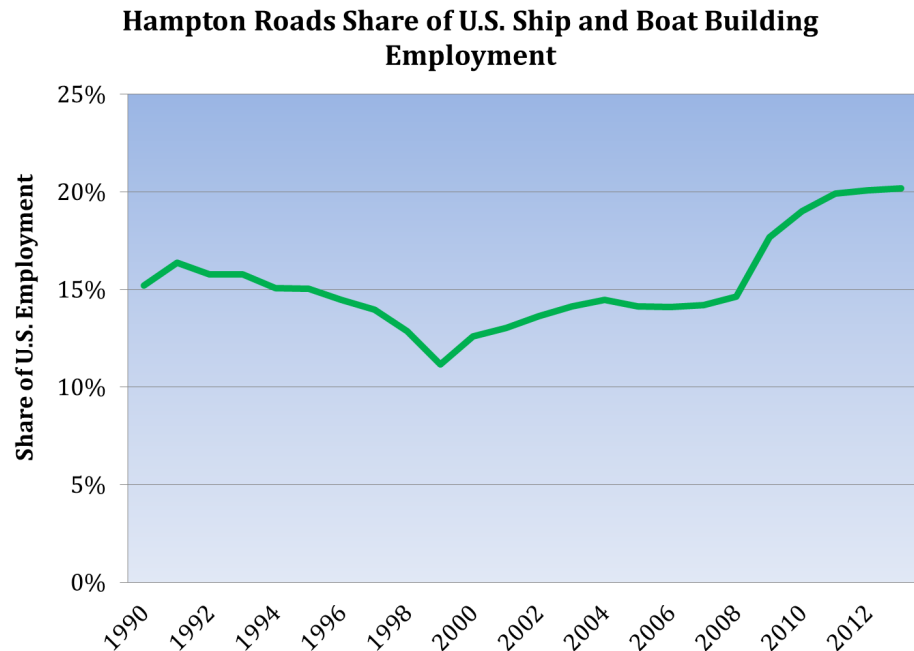
### Figure 3.11 Concentration of Ship Building and Repair Employment in Hampton Roads

#### Why is it important?

The region's share of national ship building and repair employment indicates the strength of this regional cluster.

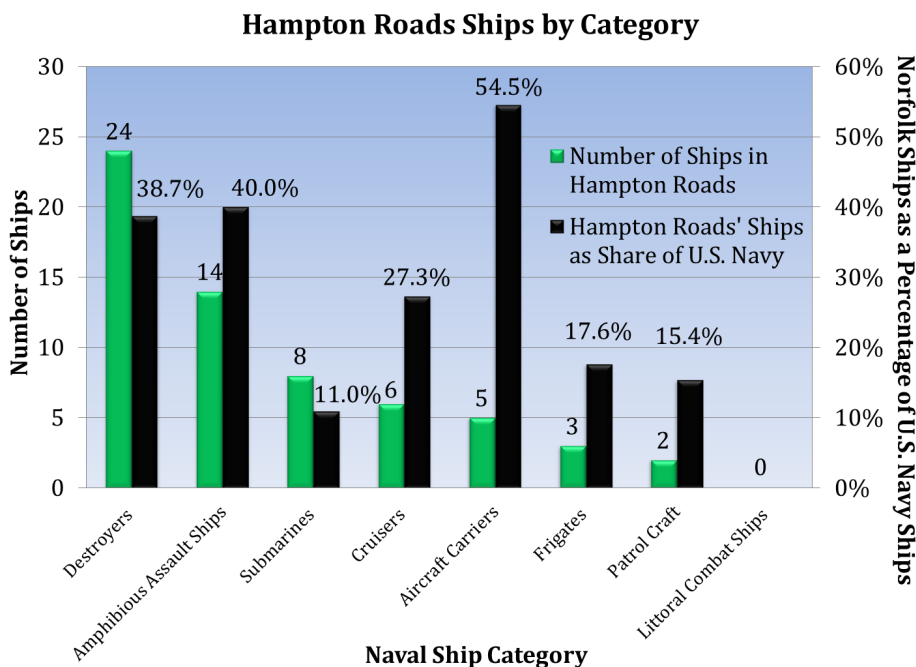
#### How are we doing?

Over 20% of U.S. employees in this industry work in Hampton Roads. Additionally, Newport News Shipbuilding is one of two U.S. shipyards that construct nuclear submarines, and the only one that constructs nuclear aircraft carriers.



Source: Bureau of Labor Statistics, HRPDC

### Figure 3.12 Ships Based in Hampton Roads and Share of Navy Total



Source: U.S. Navy, HRPDC

#### Why is it important?

This shows the relative importance of the Naval Station Norfolk as a base for U.S. Navy vessels. Additionally, the number of ships that are stationed in Hampton Roads has an important relationship to the ship building and repair industry in this region.

#### How are we doing?

This region has a significant number of nearly every major ship type in the U.S. Navy. Additionally, the count of aircraft carriers does not include those that are currently being worked on in Newport News Shipbuilding.

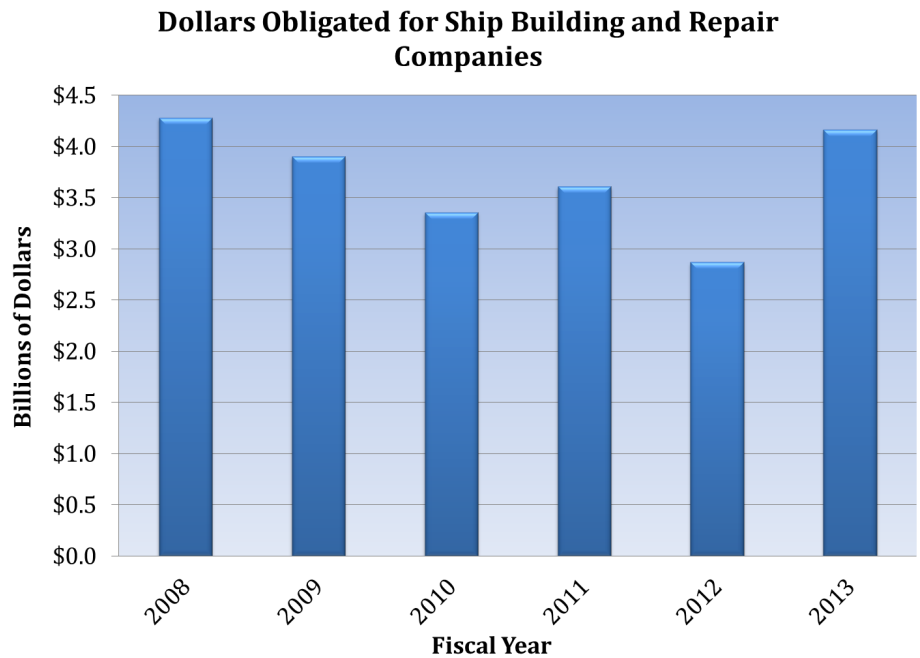
**Figure 3.13 Total Contracting for Ship Building and Repair Performed in Hampton Roads**

**Why is it important?**

These are dollars obligated by the federal government to companies with ship and boat building NAICS codes.

**How are we doing?**

The region has seen fairly consistent levels of contracting dollars in this industry. It is difficult to use one year data for ship and boatbuilding because shipbuilding dollars allocated in one year can be spent over as many as five years.



Source: USAspending.gov, HRPDC